

Q2 cont
B3 cont

20. A swivel joint comprising:
a central axis;
a male connector having an annular outer surface and a first end;
a female connector having an annular recess adapted to rotatably receive the outer surface and the first end; and
at least first and second annular bearing means located between the outer surface and the recess to facilitate rotation of the male and female connectors about the central axis;
wherein the diameter of each bearing means is larger than the diameter of each adjacent bearing means closer to the first end of the male connector.

Remarks

Reconsideration of the above-referenced application is respectfully requested.

Claims 1-5, 12 and 13 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 1 and 13 have accordingly been amended to more clearly define how the radius of each groove is constant, i.e. non-varying, but that the radius of each groove is larger than the radius of each adjacent groove closer to the first end of the male connector. In addition, claim 12 has been amended to correct its dependency. Therefore, these claims are submitted as allowable under §112, second paragraph.

Claims 1, 2, 11 and 12 stand rejected under 35 U.S.C. §102(b) as being anticipated by Rohn, U.S. Patent No. 1,325,113. Claim 11 has been canceled

for other reasons. In addition, Rohn does not anticipate claim 1 because Rohn does not disclose a swivel joint wherein the radius of each groove is larger than the radius of the adjacent groove closer to the first end of the male connector, which is located adjacent the shoulder formed in the recess of the female connector. In Rohn, to the contrary, the radius of groove 19 is smaller than the radius of groove 20 closer to the "first end". Therefore, claim 1 is patentable over Rohn.

Claims 11 and 12 stand rejected under 35 U.S.C. §102(b) as being anticipated by Hofmann et al, U.S. Patent No. 5,176,457. Claim 11 has accordingly been canceled and claim 12 amended to depend from claim 1. Therefore, claim 12 is patentable over Hofmann et al.

Claims 1 and 2 stand rejected under 35 U.S.C. §103 as being unpatentable over Waters, U.S. Patent No. 738,503, in view of Phillips, U.S. Patent No. 2,412,287, or Ashton, U.S. Patent No. 3,372,715, or Swedish Patent No. 127,402. Waters, however, does not disclose a swivel joint having roller bearing means. Rather, elements d and d' are spring bands. Moreover, the radius of groove e' closer to the male member "first end" is larger than the radius of groove e, contrary to applicants' claim 1.

Furthermore, the combination of Waters and the other references is improper. There is no indication in Waters that members A and B are permitted to rotate with respect to one another. To the contrary, since the intention is that the members are locked together to form a watertight joint (co. 2, lines 69-77), members A and B likely do not rotate. Therefore, there is no motivation in any of

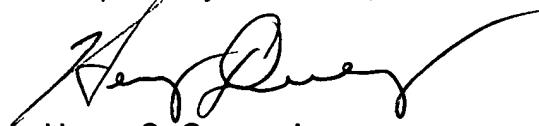
the cited references for combining Waters with either Phillips, Ashton or SW '402. Even if Waters could be modified to include the ball bearings, however, the result would not be applicants' claimed invention because the radii of the grooves in Waters are different from the radii claimed by applicants, as discussed above. Therefore, claims 1 and 2 are patentable over these references.

The Examiner has indicated that claims 3-5 and 14-17 would be allowable if rewritten to overcome the rejection under §112 and to include all the limitations of the base claims and any intervening claims. Base claims 1 and 13 have been amended to overcome the §112 rejection. However, applicants will defer rewriting the claims to include the limitations of the base and intervening claims until the Examiner considers the present amendment.

The Examiner has indicated that claims 13 would be allowable if rewritten to overcome the rejection under §112. This claim has accordingly been amended and is therefore submitted as allowable.

For the foregoing reasons, claims 1-20 are submitted as allowable.
Favorable action is solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Henry C. Query, Jr.", with a long, sweeping horizontal line extending to the right.

Henry C. Query, Jr.
Reg. No. 35,650
(312) 861-6657